

Vitamin A (Retinol)

Summary of the Evidence

- There is little evidence that vitamin A supplementation prevents cancer, improves vision, or improves skin.
- High doses of vitamin A taken for prolonged periods can cause liver damage and coma.
- During pregnancy, doses much higher than the daily recommended intake have been associated with birth defects.

Dietary Sources

- Vitamin A is present in liver, fish, egg yolk, and milk.
- Its precursors, the carotenoids, are present in yellow, orange, and red fruits (cantaloupe, peaches, strawberries) and dark green vegetables such as spinach.

Mechanism of action

- Although beta-carotene, its precursor, is a potent antioxidant, vitamin A does not have antioxidant properties.
- Vitamin A does play a role in vision, skin integrity, and appears to act within the cell to control gene expression.

Doses

- Recommended intake is 3,000 IU for men and 2,333 IU for women.

Reference

U.S. Preventive Services Task Force. Routine Vitamin Supplementation To Prevent Cancer and Cardiovascular Disease: Recommendations and Rationale. *Ann Intern Med* 2003; 51-55.